

Title (en)  
Implantable medical device

Title (de)  
Implantierbare medizinische Vorrichtung

Title (fr)  
Dispositif médical implantable

Publication  
**EP 2468357 A1 20120627 (EN)**

Application  
**EP 10196637 A 20101222**

Priority  
EP 10196637 A 20101222

Abstract (en)  
The preset invention relates to an implantable medical device connectable to at least three electrodes. The device comprises an immittance measurer operative to perform immittance measurements within the heart of a patient using at least three electrodes coupled to the device where at least one of said electrodes is arranged in an atrium of the patient's heart. The medical device further comprises an immittance converter operative to convert the immittance measurement values into individual near-field immittance values of at least one electrode being arranged in an atrium, an atrial dilatation detector operative to detect atrial dilatation based upon said individual near-field immittance values, and to determine atrial dilatation values in dependence thereto, and an atrial fibrillation risk determiner adapted to determine an atrial fibrillation risk index based upon said atrial dilatation values.

IPC 8 full level  
**A61B 5/361** (2021.01); **A61N 1/362** (2006.01); **A61B 5/00** (2006.01)

CPC (source: EP US)  
**A61B 5/0538** (2013.01 - EP US); **A61B 5/361** (2021.01 - EP US); **A61B 5/6869** (2013.01 - EP US); **A61N 1/36521** (2013.01 - EP US)

Citation (applicant)  
• WO 2004028629 A1 20040408 - ST JUDE MEDICAL [SE], et al  
• RAVELLI, MECHANO-ELECTRIC FEEDBACK AND CARDIAC ARRHYTHMIAS, PROGRESS IN BIOPHYSICS AND MOLECULAR BIOLOGY, vol. 82, no. 1-3, 2003, pages 137 - 149  
• J ZHAO ET AL.: "Effects of spironolactone on atrial structural remodelling in a canine model of atrial fibrillation produced by prolonged atrial pacing", BRITISH JOURNAL OF PHARMACOLOGY, vol. 159, 2010, pages 1584 - 1594

Citation (search report)  
• [X] WO 2009096820 A1 20090806 - ST JUDE MEDICAL [SE], et al  
• [A] WO 2004028629 A1 20040408 - ST JUDE MEDICAL [SE], et al  
• [A] WO 2004008959 A1 20040129 - ST JUDE MEDICAL [SE], et al  
• [A] EP 1384433 A1 20040128 - ST JUDE MEDICAL [SE]

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

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**EP 2468357 A1 20120627**; **EP 2468357 B1 20151028**; US 2012165692 A1 20120628

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